LEGAL STATUS OF ARTIFICIAL ISLANDS AND CLIMATE REFUGEES UNDER UNCLOS: A COMPREHENSIVE REINTERPRETATION FOR THE ANTHROPOCENE

Dr. Subholaxmi Mukherjee

Assistant Professor of Law
ICFAI University, Tripura

Abstract:
Rising seas in the Anthropocene have disrupted some of the most settled assumptions of the international legal order. At the center of this disruption lie two legal anomalies the current system is ill-equipped to manage: the uncertain maritime status of artificial islands, and the absence of a coherent protection regime for people displaced by climate-driven environmental collapse. This article argues that the legal tools created in the second half of the twentieth century—particularly the United Nations Convention on the Law of the Sea (UNCLOS), refugee law instruments, and doctrines of statehood—are structurally mismatched to the twenty-first-century realities of disappearing territory and engineered landforms.
Through a close reading of UNCLOS, state practice, and the emerging jurisprudence of maritime disputes, the article demonstrates that artificial islands, despite their increasing geopolitical and existential value, cannot generate territorial sovereignty or maritime zones. Yet, as some states face the prospect of partial or near-total submergence, these structures are no longer merely strategic installations—they have become instruments of survival for Small Island Developing States. In parallel, millions of individuals facing climate-driven displacement fall outside the scope of the Refugee Convention, leaving a profound protection gap that human rights law and the principle of non-refoulement have tried, inconsistently, to fill.
To bridge these lacunae, the article synthesizes doctrinal, normative, and policy-oriented perspectives, arguing that the international community must reimagine central categories of maritime law, sovereignty, and refugee protection. It proposes a three-part framework: (1) recognition of "survival-based statehood" enabling threatened states to retain maritime zones even after physical land loss; (2) development of a binding multilateral instrument for climate-induced displacement anchored in human rights principles; and (3) evolving UNCLOS through state practice to accommodate the stabilizing role of artificial islands without undermining the prohibition on acquiring maritime entitlements from constructed land.
The article concludes that the future stability of the international legal system—politically, normatively, and institutionally—depends on whether the law can evolve at the pace of planetary change. The survival of vulnerable states, and the dignity of millions of displaced people, hang in the balance.

Keywords: Artificial Islands, UNCLOS, Climate Refugees, Sea-Level Rise, Maritime Sovereignty, Baseline Stability, Statehood, Disappearing States, Exclusive Economic Zone (EEZ), Climate-Induced Displacement, Non-Refoulement, Human Rights Law, Anthropocene Governance, Small Island Developing States (SIDS), Deterritorialized States, Customary International Law, Refugee Convention, International Maritime Law, Environmental Migration, Ocean Governance

I. INTRODUCTION

The accelerating effects of anthropogenic climate change have produced a set of legal dilemmas that conventional public international law was never designed to manage. As rising seas redraw coastlines and threaten the physical integrity of low-lying island nations, two questions—once abstract and largely

theoretical—have rapidly moved to the center of global legal discourse. First, what is the legal status of *artificial islands* constructed by States seeking to preserve maritime entitlements as their natural landmass deteriorates? Second, how should the international legal system protect *climate refugees*, a category of displaced persons who fall outside the existing architecture of refugee law? These issues intersect most sharply under the United Nations Convention on the Law of the Sea (UNCLOS), the central treaty governing ocean spaces, maritime zones, and the rights and obligations of coastal States.

Although UNCLOS emerged from decades of negotiation, it is fundamentally a product of the late twentieth century—an era that assumed relative geographical stability. The Convention's spatial logic presumes that coastlines remain fixed, States maintain a discernible land territory, and maritime zones can be traced to a stable baseline. In the Anthropocene, these assumptions no longer hold. For many Small Island Developing States (SIDS), particularly in the Pacific region, the existential implications of sea-level rise are not simply ecological or economic; they implicate sovereignty, state continuity, and the preservation of legal personality itself. The loss of territory threatens not only the physical site of a population but also the legitimacy of baselines and maritime zones that generate valuable Exclusive Economic Zones (EEZs) and continental shelf rights.

In response, some States have pursued or contemplated the construction of artificial islands, elevated land platforms, and engineered coastal reinforcements designed to retain maritime entitlements or provide habitable ground if natural territory becomes uninhabitable. These initiatives raise complex questions about the legal character of artificial structures and whether they can serve as substitutes for naturally formed land in establishing statehood or preserving maritime zones. UNCLOS expressly distinguishes between "islands," which generate maritime zones, and "artificial islands," which do not. Yet the Convention leaves considerable ambiguity about structures built atop formerly natural land, as well as engineered expansions designed to preserve baselines threatened by erosion or submersion.

Parallel to these sovereignty-focused concerns is the humanitarian crisis emerging from climate-induced displacement. Although popular discourse frequently invokes "climate refugees," the term has no legal status under the 1951 Refugee Convention or its 1967 Protocol. Individuals fleeing rising seas, salinization, crop destruction, and storm intensification do not fit within the Convention's persecution-based definition. As a result, entire populations facing existential risk from climate change remain outside formal international protection frameworks. Past attempts to litigate climate-based asylum claims have failed, as exemplified by *Teitiota v. New Zealand*, where the UN Human Rights Committee recognized potential future risk but declined to articulate a binding right to enter another State's territory on climate grounds.

This article examines these two domains—artificial islands and climate refugees—not as isolated issues but as interrelated components of a broader transformation in international law. Both challenge foundational doctrines on which States have constructed their maritime and humanitarian obligations. Both force reconsideration of legal categories that no longer reflect material realities. And both reveal significant gaps in the normative architecture of UNCLOS and broader public international law.

The inquiry proceeds with a classic U.S. law review methodology: doctrinal analysis, close reading of treaty text, case law and jurisprudence, examination of State practice, and engagement with normative and theoretical scholarship. The aim is not simply to interpret existing rules but to interrogate their conceptual coherence and identify possible pathways for legal evolution consistent with stability, fairness, and the preservation of vulnerable States.

Part II examines the legal status of artificial islands, tracing relevant UNCLOS provisions, arbitral jurisprudence, and State practice concerning fixed baselines and engineered land. It considers whether artificial structures can acquire the legal character of islands, the implications of land reclamation, and doctrinal tensions surrounding the concept of "naturally formed" territory.

Part III turns to the law on climate displacement, analyzing why existing refugee law fails to protect climate refugees and exploring alternative frameworks under human rights law, regional agreements, and customary norms. Particular attention is given to the challenges facing populations whose States may eventually lose habitable territory.

Part IV brings the two domains together, asking whether artificial islands can play any role in preserving statehood or supporting displaced populations, and whether international law must adapt to prevent the disappearance of States whose territory becomes uninhabitable. This section advances normative arguments for doctrinal reform within UNCLOS and beyond.

The article concludes by situating artificial islands and climate refugees within a longer trajectory of legal transformations driven by environmental change, underscoring the need for anticipatory governance rather than piecemeal reaction. Taken together, these issues reveal the fragility of legal categories that once appeared stable and highlight the responsibility of the international legal community to preserve the dignity and rights of vulnerable populations in an era of profound ecological disruption.

II. THE LEGAL STATUS OF ARTIFICIAL ISLANDS UNDER UNCLOS

A. The Textual Framework: Artificial Islands Versus Natural Islands

UNCLOS draws a categorical distinction between "islands" and "artificial islands," a distinction that lies at the heart of the treaty's maritime zone architecture. Article 121(1) defines an island as a "naturally formed area of land, surrounded by water, which is above water at high tide." This definition contains three key elements: (1) natural formation, (2) landmass, and (3) visibility above water at high tide. Under Article 121(2), such islands generate territorial seas, contiguous zones, EEZs, and continental shelves. By contrast, Article 60(8) declares that "artificial islands… do not possess the status of islands." They therefore cannot generate maritime zones and are subject to a far narrower set of rights.

The textual separation between natural and artificial islands reflects the drafters' desire to prevent States from artificially expanding their maritime entitlements by constructing structures on the ocean surface. Yet the Convention's emphasis on natural formation—while clear on its face—was drafted at a time when large-scale land reclamation and geoengineering projects were not yet conceivable at their current scale. Thus, although the binary distinction remains foundational, its application to contemporary situations is far from straightforward.

The core challenge arises from contexts in which artificial structures are not built on the high seas for expansionist aims but instead serve defensive purposes—for instance, preserving habitability, preventing erosion, or extending the lifespan of territory threatened by sea-level rise. UNCLOS provides no guidance on whether artificially reinforced or elevated natural features retain their character as "naturally formed." Nor does the Convention address situations in which natural islands become permanently submerged and are replaced or supplemented by artificial structures meant to simulate or preserve territorial integrity.

This ambiguity has produced divergent scholarly interpretations and an increasing number of State practices—particularly in the Pacific and South China Sea—where artificial islands, large-scale reclamation, and coastal fortifications have transformed or replaced natural features. In these cases, the question is not only whether artificial islands generate maritime zones (they do not) but whether their construction affects the legal status of underlying natural features, preexisting baselines, and the maritime entitlements attached to them.

B. The Significance of "Naturally Formed": Doctrinal Limits and Practical Gaps

The phrase "naturally formed" appears simple but conceals considerable doctrinal complexity. During UNCLOS III negotiations, the term was introduced primarily to prevent States from creating new maritime zones through human engineering. The concern was that technologically advanced States could manipulate geography to expand their jurisdiction, undermining the equitable distribution of ocean space. However, the negotiators did not grapple with the reverse scenario—technological intervention aimed at preserving, rather than artificially creating, maritime entitlements.

The absence of guidance is consequential. If a State elevates a naturally formed island that is at risk of sinking, does it remain "naturally formed"? If a State expands an eroding island by adding reclaimed land, does the enlarged area count as a natural island, or does only the original core retain its status? Conversely, if a natural island becomes fully submerged, can a coastal State build an artificial platform in the same location and claim continuity with the lost natural feature?

UNCLOS offers no explicit answers. Nor does existing arbitral jurisprudence fully clarify the matter. The South China Sea Arbitration Tribunal in 2016 held that China's reclamation activities could not transform previously submerged features into islands capable of generating maritime zones. The Tribunal dismissed the argument that human intervention could change the legal status of a feature under Article 121. While this decision emphatically affirms the "naturally formed" requirement, it did not consider circumstances in which the purpose of engineering is preservation rather than alteration.

This gap in the Convention's logic becomes especially troubling in the context of SIDS, where land-based erosion, salinization, and submersion threaten not only territory but also identity, culture, and statehood. If a State engages in adaptation measures—raising land, fortifying coasts, reclaiming lost areas—does the

engineered land retain the legal character of naturally formed territory? UNCLOS does not expressly forbid reinforcement or modification of natural features. Indeed, many States regularly engage in land reclamation as part of coastal development. Yet the Convention's silence leaves room for conflicting interpretations, particularly where the goal is to preserve baselines and maritime zones.

The legal system must now confront the reality that technological intervention may be necessary to maintain the physical and legal existence of entire nations. Under a strict reading of UNCLOS, interventions that extend or elevate land could risk undermining the natural character of a feature and, by extension, maritime entitlements derived from it. Such a result would be perverse: climate-vulnerable States could be penalized for attempting to preserve themselves.

C. Fixed Baselines and the Challenge of Sea-Level Rise

The status of artificial islands is intimately connected to the question of baselines—the reference points from which States measure maritime zones. Under Articles 5 and 7 of UNCLOS, baselines generally correspond to the low-water line of a State's coast. If land erodes or submerges, baselines theoretically shift landward, shrinking maritime zones. This dynamic approach assumes a stable, ongoing relationship between land and sea. As coastlines recede, so too do entitlements.

In the context of sea-level rise, this logic becomes destabilizing. Contrary to the expectations of UNCLOS drafters, sea-level rise is not a temporary or localized phenomenon; it is systemic, progressive, and accelerating. Nations like Kiribati, Tuvalu, and the Maldives face the prospect of losing substantial landmass or, in worst-case scenarios, all habitable territory within this century. If baselines shift with the waterline, their EEZs—often vastly larger than their land territory—would contract or disappear. This not only jeopardizes economic resources but undermines state capacity and long-term viability.

In response, several SIDS have asserted the doctrine of "fixed baselines," arguing that once established under UNCLOS, baselines should remain permanent despite physical changes to coastlines. This interpretation does not flow explicitly from the treaty text but is rooted in principles of legal stability, equity, and the object and purpose of maritime entitlements. A number of Pacific States have enacted domestic legislation fixing their baselines and maritime zones as of a particular date. Although such unilateral acts lack international validation unless accepted by other States, they represent emerging State practice that could contribute to customary law.

If fixed baselines gain traction, artificial interventions—such as land elevation or reclamation—could serve to maintain the physical coherence of the baseline. Even if the engineered land is not "naturally formed" within the meaning of Article 121, its existence might strengthen claims that the baseline associated with the original natural coastline should remain legally valid.

D. Arbitral Jurisprudence and the Limits of Human Modification

The South China Sea Arbitration remains the leading authority on artificial islands under UNCLOS. The Tribunal held that human-made modifications cannot change the status of maritime features. This principle serves as a bulwark against expansionist uses of technology. However, the decision's reasoning must be carefully contextualized. The Tribunal focused on State behavior undertaken for strategic advantage, not adaptation to climate threats. The case did not involve SIDS seeking to preserve pre-existing islands or prevent loss of territory.

The Tribunal's emphasis on "factual and natural conditions" as the basis of island status raises concerns for climate-vulnerable States. If natural conditions determine legal status, and natural conditions are eroding due to climate change, then maritime entitlements could wither despite no fault by the State. This would compound the injustice already facing States that have contributed least to global emissions.

Nonetheless, the Tribunal implicitly recognized that human modification does not necessarily invalidate the natural character of a feature, so long as the underlying feature already qualified as an island. Reinforcement does not strip natural formation; only creation ex nihilo does. This reasoning could be extended to argue that elevating or reinforcing existing islands does not negate their natural origin. Thus, climate adaptation measures—even those involving artificial structures—should not deprive natural islands of their maritime-generating status.

This line of reasoning has yet to be tested in the context of SIDS adaptation initiatives. However, it represents a plausible doctrinal pathway for reconciling the natural formation requirement with contemporary environmental realities.

III — ARTIFICIAL ISLANDS AND THE RECONFIGURATION OF MARITIME ENTITLEMENTS UNDER UNCLOS

Artificial islands pose one of the most conceptually challenging questions in the law of the sea: how should the international legal system treat man-made structures that increasingly resemble features once produced only by nature? While artificial islands have existed for decades—Tokyo Bay's expansion, Dubai's palm-shaped archipelagos, China's installations in the South China Sea—their strategic and doctrinal significance has expanded sharply in an era defined by rising seas, coastal inundation, and the possible disappearance of low-lying States. UNCLOS, negotiated in the 1970s and early 1980s, could not have anticipated the possibility that artificial islands might someday be used not merely for commercial or military utility, but as substitutes for disappearing territories or as anchors for maritime zones that climate change threatens to erase.

This Part examines how UNCLOS conceptualizes artificial islands, why this framework is increasingly strained, and how States have attempted—through state practice, claims, and soft-law proposals—to push the boundaries of maritime entitlement. It also explores the deeper jurisprudential question: **to what extent should the international legal system permit States to manufacture territorial substitutes in order to preserve sovereign status and maritime rights in the Anthropocene?**

A. Artificial Islands as Defined by UNCLOS: A Functional but Rigid Legal Category

UNCLOS treats artificial islands with a degree of suspicion, or at least caution. Article 60(8) states unequivocally that **artificial islands "do not possess the status of islands"** and therefore "have no territorial sea of their own" nor do they "affect the delimitation of the territorial sea, the exclusive economic zone, or the continental shelf." This language is one of the clearest categorical exclusions in the Convention: artificial islands are something fundamentally different from natural islands, and the law is determined not by use or appearance but by origin.

The reasons for this categorical distinction were political and strategic rather than abstract. During UNCLOS III negotiations, delegations feared that technologically advanced States might create strategic forward bases or expand maritime claims through land reclamation. Several States expressed concerns that a State with sufficient engineering capacity could "manufacture" maritime zones. The Convention therefore immunized the maritime boundary system from technological manipulation, anchoring maritime entitlements firmly in naturally formed geography.

But this formalistic clarity comes with an increasingly obvious cost. Artificial islands are no longer mere extensions of coastal infrastructure; they are, for some States, possible instruments of survival. Particularly for low-lying atoll nations—Tuvalu, Kiribati, the Maldives—the physical loss of land risks translating into the legal loss of Statehood, maritime zones, and sovereign control over resources. UNCLOS's rigid, naturalistic conception of islands was never designed to confront this looming existential problem.

B. The Emergence of Hybrid Structures: When Is an Artificial Island Still "Artificial"?

UNCLOS assumes an ontological binary: islands are either natural or artificial, with no intermediate category. But in practice, this distinction is increasingly blurry. Coastal States frequently engage in land reclamation that expands existing natural islands, raising the question: when is an enlarged island still "natural"? Is Singapore's Jurong Island—created by merging several existing islands with extensive reclamation—still natural for legal purposes? Would the same reasoning apply if a State "fortifies" a disappearing atoll with concrete or elevates it through geotechnical engineering?

The South China Sea arbitration (Philippines v. China) touched on this issue but did not resolve it. The tribunal was comfortable distinguishing between **natural features** and **built structures**, but it acknowledged that extensive reclamation could transform the appearance and factual composition of a feature. The ruling did not address, however, the more challenging scenario in which States use technology to preserve a natural island that is otherwise eroding due to climate change. If an island is "shored up" to prevent physical disappearance, is it still natural? If its surface area doubles through "defensive" reclamation, does it remain an island in the original sense?

These questions expose a doctrinal vulnerability: **UNCLOS's binary categories may be insufficient to handle modern engineering capabilities and climate-induced transformations**. Moving forward, the law may have to distinguish between stabilization (preserving existing natural territory) and creation (manufacturing new territory). But the Convention offers no such nuance.

C. Artificial Islands as Instruments for Preserving Maritime Zones: Emerging State Practice

A growing number of States have begun exploring whether artificial structures can serve as proxies for disappearing land. Although no State has formally attempted to "replace" a natural island with an artificial one for the purpose of maintaining maritime entitlements, the idea is no longer purely hypothetical.

1. The Pacific Island States: Preservation Through Fixation

Several Pacific nations have adopted official policies endorsing the **fixation of baselines** despite physical changes in coastlines. This approach—formalized through national legislation and diplomatic submissions—signals a belief that maritime zones should not shift merely because natural geography changes. While this does not explicitly rely on artificial islands, it opens the door to using such structures as **physical reference points** for maintaining baselines.

Tuvalu, for example, has publicly discussed the possibility of combining fixed baselines with artificial reinforcement of vulnerable atolls. Similar discussions have emerged in Kiribati and the Marshall Islands. These policies represent an evolving understanding that **sovereign continuity should not depend on the whims of oceanic forces**.

2. The Maldives: Floating Urbanism as Territorial Stabilization

The Maldives' government has embraced floating island technologies, not merely as an adaptation measure but as a means of ensuring continuity of population and governance. Although these structures clearly do not qualify as "islands" under UNCLOS, their symbolic and functional role complicates the legal narrative: if a State relocates its population onto engineered platforms adjacent to existing reefs, can it plausibly claim continuity of territory? If the "original" islands sink, but the State functions on adjacent artificial complexes, has the State in any meaningful sense disappeared?

3. The South China Sea: Artificial Islands as Strategic Markers

China's extensive construction in the South China Sea, while not framed as a climate adaptation measure, demonstrates that artificial islands can be developed to mimic natural territorial installations—airstrips, harbors, housing, lighthouses. Although UNCLOS rejects using these structures to expand maritime zones, the fact that such installations exist and are heavily defended creates an emerging body of practice: States increasingly treat certain artificial islands as having quasi-territorial significance, even if not full legal entitlement.

D. Artificial Islands and the Problem of Deterritorialized or Partially Territorial States

A deeper question lies beneath the doctrinal analysis: how should international law conceptualize States that retain population, government, and international personality, but lose their natural territory? Can artificial islands—permanent, habitable megastructures—serve as the territorial substrate necessary for Statehood?

Classical international law assumes that Statehood requires territory. But it does not specify **what kind** of territory. The Montevideo Convention's reference to a "defined territory" does not require that the territory be natural, nor does it require that it be of any particular size or geological composition.

Several scholars argue that if a State relocates its population and government onto an engineered platform situated above its former land—or within its historic maritime zone—it should still meet the territorial requirement. Territory, in this view, is as much a functional and jurisdictional concept as a geological one.

Others resist this interpretation, warning that weakening the natural-territory requirement risks destabilizing the conceptual boundaries of Statehood and may invite abuses. If a State can be based on a floating megastructure, could wealthy non-State actors or corporations attempt to create "new States" offshore? Would sovereignty become a purchasable commodity?

These concerns, while legitimate, may overlook the unique moral and legal position of climate-threatened nations. A State that loses its land through no fault of its own—and seeks preservation through artificial means—is not asserting opportunistic sovereignty but attempting to preserve its existence. The law's rigidity should not serve as a vehicle for erasing vulnerable States.

E. Artificial Islands and Baseline Stability: A Doctrinal Collision with Climate Realities

The baseline problem sits at the heart of UNCLOS's difficulty with artificial islands. Maritime zones are measured from baselines that follow the low-water line along the coast. If the coast erodes, the baseline moves. If it submerges entirely, the baseline disappears.

UNCLOS's system thus rests on a silent premise: **coastlines are stable enough over time to provide a reliable anchor for maritime zones**. Climate change has shattered that premise.

Some States propose using artificial islands to "mark" historic baselines, arguing that the physical marker should matter more than the natural coastline. Others propose that artificial islands be used to preserve or replace low-tide elevations that anchor straight baselines or EEZ claims.

But these approaches run directly into UNCLOS's textual barrier. Artificial islands "have no territorial sea of their own" and "do not affect" maritime boundaries. Accepting them as baseline markers would require explicit doctrinal reinterpretation or formal treaty amendment.

Nevertheless, the pressure is building. As sea-level rise accelerates, the law faces a stark choice: preserve the letter of UNCLOS or preserve the maritime rights of States that have done the least to cause climate change. The use of artificial islands as baseline anchors may be legally radical, but it may also be morally necessary.

F. A Doctrinal Vacuum: Artificial Islands for Climate Refuge Protection

While artificial islands are often discussed in relation to sovereignty, their potential role in **protecting displaced populations** is less examined. Could a consortium of States construct artificial islands to resettle climate-displaced communities? Could an endangered State, facing physical disappearance, create artificial territory to retain not only Statehood but also a safe refuge for its citizens?

UNCLOS does not prohibit this. International refugee law does not address it. Human rights law offers support for non-refoulement but does not guarantee a right to relocation on artificial territory.

This legal vacuum leaves climate-threatened nations in a precarious position. The construction of artificial islands may provide a humanitarian lifeline, but without an integrated legal framework, these structures risk being treated as engineering curiosities rather than instruments of global justice.

IV. CLIMATE REFUGEES, STATEHOOD, HUMAN RIGHTS, NON-REFOULEMENT, AND THE FUTURE OF INTERNATIONAL LAW

The question of how international law responds to climate-induced displacement is no longer a theoretical exercise. For several Small Island Developing States (SIDS), particularly in the Pacific, sea-level rise has become a structural condition of existence. It infiltrates their soil, compromises their freshwater systems, erodes their coastlines, and slowly transforms their territorial integrity. As the physical space shrinks, so does the conceptual architecture of statehood, sovereignty, and personhood. The legal order built in the mid-twentieth century—largely for a world shaped by war, decolonization, and industrial expansion—now strains under the weight of geophysical processes that are unfolding on a planetary scale.

Dalton's observation that "international law is a latecomer in recognizing environmental harms as human harms" has rarely felt more prescient. Climate displacement lays bare not merely the inadequacy of specific treaties but the conceptual lag in the international legal system itself. The challenge is therefore twofold: **(1) how should the law classify and protect persons displaced by climate change?** and **(2) what happens to the legal personality of a state whose territory becomes uninhabitable or disappears entirely?** The law of the sea, refugee law, human rights law, and statehood doctrine all intersect here, but none yet provide a complete answer.

This Part addresses five core questions:

1. **Are climate-displaced persons "refugees" under contemporary international law?**
2. **Does the principle of non-refoulement protect climate-affected individuals?**
3. **Can a state continue to exist without territory or with relocated populations?**
4. **How do human rights norms inform the treatment of climate migrants?**
5. **What reforms—or normative shifts—are necessary to align international law with the realities of the Anthropocene?**

The answers remain contested, yet the trajectory of state practice, human rights jurisprudence, and doctrinal scholarship suggests a slow but meaningful convergence toward recognition, albeit through fragmented pathways rather than a single, unified legal instrument.

A. The Refugee Convention and the Limits of a 1951 Definition

The 1951 Refugee Convention was drafted in the aftermath of the Second World War, at a time when persecution was understood through profoundly political lenses. Its definition of a refugee—requiring a well-founded fear of persecution on the basis of race, religion, nationality, membership in a particular social group, or political opinion—was never intended to accommodate environmental or climatic drivers of displacement. As a result, individuals fleeing sea-level rise, coastal erosion, floods, salinization, or slow-onset environmental degradation do not fit neatly into the existing framework.

Academic literature is split on whether the Convention could be interpreted expansively to cover climate-related harms. Some scholars argue that state inaction or discriminatory resource allocation in response to climate impacts could constitute "persecution." Others point to analogies with social group jurisprudence, suggesting that "inhabitants of a climate-vulnerable region" may be considered a particular social group. However, these arguments remain doctrinally strained and have not been accepted by any major court.

State practice likewise reveals an overwhelming reluctance to stretch the Convention beyond its textual boundaries. Governments have consistently treated climate displacement as a humanitarian concern, not a legal obligation. The absence of consensus reflects not only doctrinal conservatism but also geopolitical caution: recognition of climate refugees could impose significant responsibilities on industrialized states, which are simultaneously the world's largest historical emitters and the most attractive destinations for migration.

Thus, while moral and historical arguments favor extending refugee protections to climate-affected populations, the legal architecture of the Refugee Convention is, by its design, ill-suited for such a task. Any solution will more likely emerge through human rights law, soft-law instruments, or new treaties, rather than through reinterpretation of the 1951 framework.

B. Non-Refoulement and Climate Displacement: A Principle Stretching at Its Edges

Even though climate-displaced persons do not fall within the Refugee Convention's definition, they may still benefit from the broader, customary international law principle of **non-refoulement**, which prohibits returning individuals to a place where they face real risks to life or inhuman treatment. Traditionally grounded in refugee law, non-refoulement has gradually expanded into human rights jurisprudence through the ICCPR, CAT, ECHR, and other instruments.

The landmark *Teitiota v. New Zealand* decision (2020) before the UN Human Rights Committee (HRC) marked the first time an international adjudicatory body grappled directly with the implications of climate change for non-refoulement. While the HRC upheld New Zealand's removal order, it acknowledged that climate impacts **can**, in principle, trigger non-refoulement obligations when they "place individuals at imminent risk of irreparable harm."

What made *Teitiota* notable was not the outcome, but the doctrinal shift it represented. The Committee moved away from traditional persecution-based analysis toward a harm-based framework that recognizes environmental collapse as a threat to life and dignity. The HRC's reasoning suggests that when climate impacts reach a threshold where they undermine basic subsistence—food, water, housing, or physical safety—states may no longer be legally permitted to repatriate individuals to those conditions.

While *Teitiota* did not establish binding precedent, it signaled that **climate conditions can activate non-refoulement obligations even absent persecution**. Many scholars view this as a quiet but significant expansion of international responsibility, rooted in human rights rather than refugee law.

National courts have begun to engage with similar claims, though outcomes vary widely. European jurisprudence, particularly under the ECtHR, has slowly broadened the interpretation of Article 3 of the ECHR to encompass environmental factors in cases involving extreme poverty, health risks, or inhumane living conditions. While climate displacement cases have not yet reached Strasbourg in substantial numbers, the Court's current jurisprudence could plausibly be extended to cover climate-related harms that rise to the level of degrading treatment.

The broader implication is that **non-refoulement may become the primary legal safeguard for climate-affected individuals**, even if it remains reactive and case-specific rather than establishing firm rights to admission or residency.

C. Statehood in a Warming World: Territory, Population, and the Endurance of Legal Personality

The question of what happens to statehood if territory becomes uninhabitable or completely submerged is perhaps the most radical doctrinal challenge posed by climate change. Traditional statehood doctrine—reflected in the Montevideo Convention—requires population, government, capacity to enter relations, and territory. The loss of territory, particularly permanent territory, has traditionally been viewed as incompatible with continued statehood.

Yet this classical view was never designed to address a scenario where a state's landmass disappears due to anthropogenic climate change, exacerbated by the emissions of other states. There is currently no rule in international law that mandates the "extinction" of a state whose territory becomes uninhabitable. Nor is there

precedent for a deterritorialized state that continues to exist as an international legal person, maintains diplomatic relations, or holds membership in the United Nations.

Several Pacific states have adopted forward-looking legal strategies to preserve their maritime zones, territorial claims, and legal identity in the face of land loss. For instance, leaders of Kiribati, Tuvalu, and the Marshall Islands have articulated visions of **"statehood without territory,"** supported by digital governance frameworks, constitutional reforms, and the possibility of relocating populations while retaining nationality and sovereignty. Their argument is straightforward: territorial loss due to climate change—caused overwhelmingly by external actors—should not erase their legal identity or extinguish centuries of cultural and political continuity.

Whether these efforts gain traction depends significantly on the attitudes of other states. Scholars such as Rosemary Rayfuse and Jane McAdam have argued that **statehood is, at its core, a social fact sustained through recognition**, rather than a rigid checklist. If the international community accepts that submerged or uninhabitable states continue to exist as legal persons, then they do. If recognition is withheld, the legal personality may erode.

One of the most consequential implications concerns **maritime zones**. Under UNCLOS, maritime entitlements are measured from baselines, which are currently ambulatory. Sea-level rise could therefore shrink EEZs and continental shelves, severely undermining the rights of SIDS. However, through declaratory practice and multilateral initiatives, a growing number of states support the notion that **baselines should remain fixed** notwithstanding physical changes to coastlines. If accepted broadly, this principle would allow SIDS to preserve their maritime rights—and their associated economic value—even after losing habitable land.

Thus, climate-affected states may be moving toward a novel form of legal personality: one grounded less in territory and more in continuity, self-determination, and the collective will of the international community.

D. Human Rights Frameworks and Positive Obligations Toward Climate-Displaced Persons

While refugee law remains largely static, human rights law has been far more adaptive in addressing climate vulnerability. At its core, climate displacement implicates the right to life, the right to adequate housing, the right to health, and, in certain circumstances, the right to culture and self-determination.

The right to life, as interpreted by the HRC and regional human rights courts, encompasses not merely freedom from arbitrary killing but also the conditions necessary to live with dignity. This broader conception makes climate degradation a legitimate human rights concern. If environmental collapse deprives individuals of water, food, or safe shelter, states may be obligated to take affirmative steps to protect them—whether through internal relocation, adaptation measures, or, in some circumstances, granting residence to those seeking protection.

Similarly, the concept of cultural rights under the ICCPR provides an additional foothold for indigenous and community-based claims. For example, the Inuit and Torres Strait Islander petitions before UN human rights bodies have argued that climate impacts erode cultural practices, religious rituals, and traditional livelihoods. If accepted, these claims would embed climate displacement within a larger discourse of cultural preservation and collective identity.

The emerging convergence between human rights and climate law has produced a patchwork of obligations: some binding, some aspirational, but all moving in a direction that elevates the dignity and autonomy of climate-affected communities. The challenge is that these obligations remain largely uncoordinated, leaving states significant discretion in practice.

E. The Normative Horizon: Toward a Coherent Legal Regime for Climate Mobility

The lack of a unified framework for climate displacement leaves millions of people in legal limbo. While some forms of protection can be constructed from human rights law, non-refoulement jurisprudence, and domestic humanitarian policies, the overall regime remains reactive. Climate mobility demands a forward-looking architecture—one that recognizes the inevitability of population movement and addresses it not as a crisis but as a structural reality.

Several proposals have gained traction:

1. **A New Climate Mobility Treaty**: Scholars have proposed a dedicated treaty establishing rights of movement, admission, and residency for climate-affected persons. Such a treaty could incorporate burden-sharing mechanisms, adaptation financing, and provisions for voluntary planned relocation. The political feasibility remains uncertain, but the normative case is compelling.

2. **Regional Frameworks**: The African Union, EU, and Pacific regional organizations are well-positioned to create regionally tailored mobility regimes. Regional frameworks may be more likely to garner political support and can be integrated with existing migration systems.
3. **Expanded Use of Humanitarian Visas**: States could unilaterally provide humanitarian visas or temporary protection to individuals from climate-affected regions. Such measures, while discretionary, could serve as precursors to more formalized systems.
4. **Recognition of "Deterritorialized States"**: A more radical but increasingly plausible pathway involves formal recognition of states whose territory becomes uninhabitable but whose legal identity endures. This would require reevaluating traditional conceptions of sovereignty but aligns with principles of equity, self-determination, and historical responsibility.
5. **Fixed Baselines Under UNCLOS**: The movement toward fixed baselines could stabilize maritime entitlements and prevent the geopolitical upheaval that would result from shifting EEZ boundaries. It would also reflect the principle that victims of climate change should not lose economic rights due to environmental harms they did not cause.

Taken together, these developments reflect a legal order in the midst of transformation. International law is slowly adapting to the realities of climate disruption, though not yet with the coherence or urgency required.

F. Conclusion: The Coming Era of Climate Mobility and Juridical Innovation

Climate displacement is no longer an abstract projection. It is a lived reality for communities whose lands are eroding, whose freshwater is salinizing, and whose cultural existence is tied to territories that may soon be submerged. The legal categories that once defined displacement—war, persecution, political violence—are inadequate in an era where environmental transformation is driven by global industrial activity and historical carbon emissions.

As the international legal system stands at this crossroads, it must decide whether to treat climate mobility as an anomaly to be managed—or as a defining feature of the Anthropocene that requires a fundamentally reimagined framework. The answer will shape not only the lives of millions of climate-vulnerable people but the very future of sovereignty, territoriality, and human rights in a warming world.

V. CONCLUSION, POLICY PROPOSALS, AND DOCTRINAL SYNTHESIS

The preceding discussion reveals a structural problem at the heart of contemporary international law: the legal categories that govern territory, statehood, and human mobility were built for a world that assumed geographical stability. UNCLOS presupposes a coastline that does not migrate. Refugee law presumes that people flee identifiable persecution rather than a progressively uninhabitable homeland. Statehood doctrine still imagines the State as physically rooted in a definable slice of the earth's surface. The climate crisis, however, destabilizes all three assumptions simultaneously. As sea levels rise and small island States confront the dual threat of territorial erosion and demographic displacement, these inherited doctrines strain to accommodate realities they were never designed to face.

The legal status of artificial islands, the rights of climate-displaced persons, and the survival of States whose physical territory is compromised, together form a triad of normative gaps. None has a definitive solution under existing treaty law. UNCLOS is explicit that artificial islands lack the legal qualities of natural islands, and no amount of engineering finesse can convert a constructed platform into sovereign territory. Likewise, the Refugee Convention is historically tethered to persecution, leaving climate-driven mobility in a humanitarian grey zone. And while the Montevideo Convention articulates the classical requirements of statehood, it does not address what happens when a State loses its historical land base but retains a political community, diplomatic recognition, and a functioning government in exile.

A coherent response, therefore, requires a doctrinal recalibration—one that respects the architecture of international law but acknowledges its need to evolve in the face of existential planetary transformation. The following policy and doctrinal proposals aim to chart a legally defensible and politically realistic pathway for such an evolution.

A. Reconceptualising Territorial Stability Under UNCLOS

The most immediate—and least politically disruptive—reform would involve clarifying, either through treaty amendment or authoritative interpretation, that **once established, baselines may remain legally fixed notwithstanding physical coastal regression**. This "legal stability doctrine" has already found support in the Pacific Islands Forum and among several maritime law experts. Fixing baselines would not immunize States

from the environmental consequences of the climate crisis, but it would prevent an automatic shrinking of maritime zones that could otherwise compound ecological loss with geopolitical dispossession.

A second reform concerns the legal status of artificial islands. While extending sovereignty to constructed landmasses would raise overwhelming concerns of abuse, a narrowly tailored exception—restricted to artificial islands that serve as *protective extensions* of naturally eroding coastlines—could be contemplated. Such an exception would neither rewrite the core prohibition of Article 60(8) nor invite States to create sovereignty through construction; rather, it would recognize that defensive coastal augmentation is materially different from the creation of wholly artificial offshore installations designed to expand jurisdictional claims. A "defensive adaptation" standard could be defined through objective criteria: physical contiguity with the original landmass, ecological necessity, and the absence of geopolitical opportunism.

B. Reimagining Protection for Climate-Displaced Persons

The legal category of "refugee" should not be stretched beyond recognition to absorb climate-induced displacement, but neither should law remain silent in the face of a migration phenomenon that is foreseeable, empirically grounded, and morally urgent. There are several pathways forward.

First, States could negotiate a **Protocol on Climate-Induced Displacement** under the Refugee Convention or, alternatively, under the UNFCCC framework. Such a protocol would not replicate the persecution standard but could adopt a risk-based threshold: individuals whose lives, security, or subsistence are threatened by climate impacts should receive temporary or permanent protection in receiving States.

Second, even without a new treaty, the principle of **non-refoulement** provides a doctrinal foothold. Regional jurisprudence—particularly from the Human Rights Committee—has already recognized that returning individuals to environments where climate degradation poses an irreparable threat may violate the right to life. States should therefore adopt domestic legislation codifying a "climate non-refoulement" obligation that applies independently of refugee status.

Third, more innovative policy instruments—including humanitarian visas, regional mobility agreements, and planned relocation frameworks—should be normalized rather than treated as exceptional or experimental. The legitimacy of such mechanisms depends on viewing climate-driven movement as a form of *adaptive mobility* rather than an irregular or unlawful phenomenon.

C. Preserving Statehood in an Era of Territorial Loss

Perhaps the most radical challenge to classical doctrine lies in the possibility that a State may continue to exist even after losing its habitable land territory. While some scholars have argued that territorial loss necessarily terminates statehood, this interpretation is neither compelled by the Montevideo Convention nor consistent with historical practice. Governments-in-exile have at times retained recognition, diplomatic rights, and nationality frameworks despite losing de facto control over territory.

Going forward, the international legal system should explicitly recognize **the continuity of deterritorialized States**—provided that (i) the political community remains cohesive, (ii) the government retains international recognition, and (iii) the State exercises jurisdiction over its nationals, even if extraterritorially. For small island States rendered uninhabitable by sea-level rise, continuity doctrines would serve not as legal fictions but as instruments of justice, ensuring that climate victims do not suffer erasure in both physical and juridical terms.

The possibility of maintaining maritime entitlements, including EEZs, even after the loss of emergent land territory should also be considered. Such entitlements could be anchored in fixed baselines and justified on the grounds that communities whose territories have been submerged are entitled to retain access to the marine resources that historically sustained them. Far from being an aberration, such continuity may become indispensable for economic survival and geopolitical stability.

D. Integrating Climate Justice Into the Law of the Sea and Human Rights Frameworks

The most enduring reform must be normative rather than merely procedural. Climate change, by its nature, foregrounds questions of distributive justice, intergenerational equity, and global responsibility. Any legal framework addressing artificial islands, coastal erosion, and climate displacement must therefore incorporate a broader normative commitment: the recognition that those least responsible for the crisis are often those most profoundly affected.

Three principles should guide this integration:

1. Responsibility Differentiation

States historically responsible for greenhouse gas emissions should bear enhanced duties toward climate-affected States, including financial contributions for adaptation, migration support, and the preservation of statehood.

2. Collective Stewardship of Oceanic Space

Rather than being treated as purely economic zones, maritime spaces—particularly those belonging to submerged or threatened States—should be conceived as shared ecological trusts whose preservation serves global interests.

3. Human Dignity and Mobility

Mobility in response to climate impacts must be framed as an exercise of human agency rather than an administrative inconvenience or legal anomaly. The law must not force individuals to remain in environments incompatible with life, nor may it criminalize adaptive migration as "voluntary" or "economic" when the underlying drivers are clearly climate-related.

E. Doctrinal Synthesis

Taken together, the proposals advanced here do not seek to dismantle the architecture of UNCLOS, refugee law, or statehood doctrine, but to reinterpret them in ways that preserve their internal coherence while extending their relevance to unprecedented circumstances.

UNCLOS can accommodate climate realities if baselines are allowed legal stability and artificial islands used as defensive measures receive limited recognition. Refugee and human rights law can protect climate migrants through a renewed understanding of non-refoulement and the development of climate displacement protocols. Statehood doctrine can evolve to ensure the continuity of small island States that retain functional governance despite territorial loss.

The synthesis of these reforms rests on a simple but profound premise: **international law must remain capable of protecting human communities even when the physical foundations of their existence are transformed by forces beyond their control**. To insist on rigid territoriality, narrow refugee definitions, and antiquated statehood requirements would be to allow legal formalism to triumph over human reality. The legitimacy of international law, however, has always depended on its ability to respond to human suffering in ways that are principled, equitable, and morally intelligible.

F. Final Reflections

The climate crisis will not wait for doctrinal consensus. Sea-level rise, salinization, and extreme weather events are already forcing communities to adapt in ways that unsettle long-settled legal categories. The task before the international community is therefore not simply to debate the future of artificial islands, maritime zones, and climate mobility, but to recognize that the law itself must evolve if it seeks to remain a meaningful instrument of global order.

Artificial islands can assist adaptation but cannot substitute for territory. Climate refugees challenge established protection frameworks but reveal the moral inadequacy of the status quo. The looming crisis of disappearing States forces international law to confront its own conceptual limits.

In addressing these intertwined challenges, the international legal system faces a moment of existential choice. It may cling to formalistic doctrines that fracture under the weight of environmental transformation, or it may seize the opportunity to craft new norms—grounded in justice, human dignity, and ecological awareness—that preserve both legal stability and human survival.

The stakes could not be higher. The law of the sea, refugee protection, and statehood doctrine are no longer abstract academic inquiries; they are instruments of human continuity. Their evolution will determine whether the smallest and most vulnerable States of our world can retain their place in the international community, whether climate-displaced families will find protection or exclusion, and whether the law will serve as a shield for the powerless or a relic of a world that no longer exists.

International law must choose the former. The future demands nothing less.

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